

**City of Bismarck Storm Water Plan
for compliance with
EPA Phase II
Storm Water Rules and Regulations**

In order for the City of Bismarck to achieve compliance with the EPA Phase II Storm Water Rules and Regulations that will go into effect in 2003 the city has developed a Storm Water Plan. EPA guidelines address six (6) areas that need to be addressed with the City's Storm Water Plan. These six areas are **Public Education and Outreach, Public Participation / Involvement, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Control, and Pollution Prevention / Good Housekeeping**. The following narrative outlines a plan developed to address Minimum Control Measures for each of these six areas. Measurable Goals, which are required for each of the Minimum Control Measures, are intended to gauge permit compliance and program effectiveness. The narrative addresses activities which will be required by the City in the form of public information and education, education of the City staff, maintenance procedures, recommendations for new or modified construction standards for the City, recommendations for additional or modified City ordinances, recommended measurable goals, and timetables for the attainment of the goals within each area. The city will work with other public entities within the MS4, including Bismarck State College, United Tribes Technical College, North Dakota State Capitol Grounds and the North Dakota Army National Guard facilities to assure that they adhere to the requirements of the city's ordinances.

Public Education and Outreach

To comply with the minimum control measures for Public Education and Outreach the City must:

1. Implement a public education program to distribute educational materials to the public, or conduct equivalent outreach programs and activities about the impact of storm water discharges on local waterways. The program must address steps that the general public could take to help reduce storm water pollution.
2. Determine the appropriate best management practices (BMPs) and measurable goals for these minimum control measures.

The following areas will be addressed:

1. Develop educational materials and programs to cover the following:
 - A. Information on the harmful effects of storm water pollution.
 - B. The programs the City has available for the reduction of storm water pollution, including spring and fall cleanup weeks, household hazardous waste collection, used motor oil collection site, grass and leaf collection sites, and regular street sweeping.

- C. The harmful effects of the improper use and disposal of fertilizers, herbicides, pesticides, and other common chemicals.
- 2. Semi-annual newsletters will be distributed to the public.
- 3. Regular press releases will be used to inform the public of the City services that are available to help reduce storm water pollution.
- 4. The City will work with local media to inform the public regarding newsworthy events related to storm water pollution and water quality issues and will pursue coverage through the media when significant storm water events occur.
- 5. Develop a presentation/program on the effects of storm water pollution that can be presented to school classes, service organizations, trade groups, etc.
- 6. Include storm water pollution information on the City website along with links to other sources of information on this topic.
- 7. Establish a procedure for citizens to report storm water quality concerns or ordinance violations.
- 8. Include information on City storm water related programs with monthly water bills.
- 9. Work with local schools, scout groups, and others to implement an ongoing storm water inlet stenciling program to discourage the disposal of pollutants in them.
- 10. Develop partnerships with the Burleigh County Extension Service, commercial lawn care service providers and garden centers to distribute educational materials on proper use of mulches, fertilizers, pesticides, and efficient irrigation.

The following City department will be responsible:

City of Bismarck
 Public Works Department
 P.O. Box 5503
 Bismarck, ND 58506-5503
 (701) 222-6431

Recommended goals for this area are:

Year 1.....Selection of program coordinator, development of educational material on storm water pollution and city programs, semi-annual newsletters, press releases and news coverage, developing a reporting procedure for violations, inclusion of storm water information on water bills, submit annual report to North Dakota Department of Health.

Year 2.....Continue development and distribution of educational information, newsletters, press releases and water bill information, develop presentation/program and use it for outreach activities, put storm water information and links on City website, implement ongoing inlet stenciling program, submit annual report to North Dakota Department of Health.

Year 3.....Continue all above activities, develop partnerships for education on proper lawn care.

Year 4 and 5.....Continue all above activities.

Public Participation and Involvement

To comply with the minimum control measures for Public Participation and Involvement the City must:

1. Comply with all applicable city, state and federal public notice requirements.
2. Hold an annual public information meeting to address the Storm Water Pollution Prevention Program.
3. Determine the appropriate best management practices (BMPs) and measurable goals for these minimum control measures.

The following areas will be addressed:

1. Establish a process to solicit citizen input on program development and effectiveness. This will include a determination of the stakeholders, how notice of the meeting(s) will be provided, how input will be solicited and accepted, and how the results will be used to make adjustments to the plan.
2. Hold at least one public meeting annually to obtain input on the effectiveness of the City Storm Water Program and based on input, make adjustments to the program as appropriate. This will be done each year prior to submitting the annual report.
3. Develop and identify opportunities for individuals and community groups to become involved in controlling storm water pollution, including inlet stenciling, illicit discharge detection, pollution prevention, and proper disposal and recycling of wastes.
4. Establish a procedure for citizens to report storm water quality concerns or ordinance violations.

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Recommended goals for this area are:

- Year 1.....Establish process to solicit citizen input, hold annual meeting, submit annual report to North Dakota Department of Health.
- Year 2.....Continue citizen input process, hold annual meeting, encourage volunteer involvement, and track number of people involved, implement procedure for citizen reporting of violations, submit annual report to North Dakota Department of Health.
- Year 3 -5.....Continue citizen input process, hold annual meeting, encourage volunteer involvement, and track number of people involved, track number of problems or violations reported, submit annual report to North Dakota Department of Health.

Illicit Discharge Detection and Elimination

To comply with the minimum control measures for Illicit Discharge Detection and Elimination the City must:

1. Develop a storm sewer system map showing the location of streams, lakes, storm water detention ponds, all pipes and conveyances within the system and outfalls.
2. Develop ordinances and regulations that restrict non-storm water discharge into the storm sewer system along with appropriate enforcement procedures and actions.
3. Develop and implement a plan for the detection of illicit discharge.
4. Educate the public, businesses, and City employees of the hazards associated with illegal discharges and improper waste disposal.

To address the requirements of this area the City must complete the following:

1. Complete the City storm sewer system map.
2. Update existing ordinances to restrict non-storm water discharges into the storm sewer system.

3. Develop an educational program for the public, businesses, and City employees for the detection of illicit discharge.
4. Develop a program to allow for the identification and reporting of illicit discharge by the public, businesses, and City employees.
5. Develop a process to correct illicit discharge and document which corrective actions were taken.

The following City department(s) will be responsible:

City of Bismarck	City of Bismarck
City Engineering Department	Public Works Department
P.O. Box 5503	P.O. Box 5503
Bismarck, ND 58506-5503	Bismarck, ND 58506-5503
(701) 222-6580	(701) 222-6431

Recommended goals for this area are:

Year 1.....Complete the storm sewer map and update the existing ordinances to assure that non-storm water discharge is prohibited from being discharged into the storm sewer system, submit annual report to North Dakota Department of Health.

Year 2.....Develop an educational program for the public, businesses, and City employees, begin employee training programs, develop a procedure for logging and responding to illicit discharge complaints, and begin inspection process to visually detect illicit discharges, submit annual report to North Dakota Department of Health.

Year 3 and on....Continue distributing educational material, continue employee training programs, continue responding to illicit discharge complaints, continue with inspection process to visually detect illicit discharge, submit annual report to North Dakota Department of Health.

Construction Site Storm Water Runoff Control

To comply with the minimum control measures for Construction Site Storm Water Runoff Control the City must address the following areas:

1. Develop, update, implement, and enforce a program that will address proper erosion and sediment control as well as reduce pollutants in the storm water from construction sites of more than one acre, including City projects or as the City may deem necessary. This shall also include the control of construction site waste that may impact storm water runoff.
2. Revise existing and develop new procedures for the review of construction site plans for potential water quality impacts.

3. Develop procedures for site inspections and enforcement of control measures.
4. Develop penalties or sanctions to ensure compliance with appropriate ordinances.
5. Establish procedures for the receipt and consideration of information submitted by the public.
6. Determine the appropriate best management practices (BMPs) for Construction Site Storm Water Runoff Control.

To address these areas the City recommends the following:

1. Updating the existing storm water management ordinance for the control of onsite runoff from construction sites larger than one acre, including City projects.
2. Develop construction standards for onsite erosion and sediment control, including recommended BMPs.
3. Continue to require the submittal and review of storm water management plans for site plans on areas one acre or larger. Storm water management plans must include runoff plans as well as erosion and sediment control measures as well as control of construction site waste.
4. The City will develop an education program and provide proper training for City staff to perform review of storm water management plan submittals.
5. Expand the inspection authority of the City staff to include the inspection of construction site runoff control, and educate and train the staff to perform these activities. Develop a tracking and reporting process for each site inspection.
6. Through City ordinance establish penalties and/or sanctions for contractors failing to comply with the storm water management plan by implementing either fines, notice of termination (stop work), revocation of building permits, etc.
7. Hold meetings with local contractors to educate them on effective erosion and sediment control methods for construction sites as well as seek input on the storm water management program and to review new methods and technologies relating to construction site runoff control.

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 (701) 222-6580

City of Bismarck
 Public Works Department
 P.O. Box 5503
 Bismarck, ND 58503-5506
 (701) 222-6431

Recommended goals for this area are:

- Year 1.....Complete the ordinance revisions to establish construction site runoff plans and enforcement provisions, develop construction standards for onsite erosion and sediment control, develop educational material and train personnel on the review of storm water management plans and inspection procedures, hold meeting for contractor input, submit annual report to North Dakota Department of Health.
- Year 2.....Begin enforcement of revised ordinances, continue to train City personnel on review and inspection procedures, develop a reporting and tracking procedure for information submitted by the public, hold annual meeting for contractor input, submit annual report to North Dakota Department of Health.
- Year 3.....Continue site inspections and ordinance enforcement, consider information received from the public, hold annual meeting for contractor input, submit annual report to North Dakota Department of Health.
- Year 4 and 5.....Continue the site inspections and ordinance enforcement, consider information received from the public, and submit annual report to North Dakota Department of Health.

Post Construction Runoff Control

To comply with the minimum control measures for Post-Construction Runoff Controls the City must:

1. Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs).
2. Develop an ordinance or other regulatory mechanism requiring the implementation of Post-Construction Runoff Control.
3. Ensure the adequate long-term operation and maintenance of said controls and determine appropriate best management practices and measurable goals for these minimum control measures.

To address these minimum control measures the City recommends the following:

1. Through proper planning and zoning controls develop guidelines for growth around sensitive areas and areas which are considered undevelopable.
2. Develop BMPs for post construction runoff water quality control as appropriate.
3. Revise existing ordinances to address water quality issues from developing and redeveloping areas.

4. Expand the inspection authority of the City staff to include the inspection of post construction runoff control and have them properly trained to perform these activities. Develop a tracking and reporting process for each site inspection.
5. Develop long-term operation and maintenance of BMPs installed as a result of existing and proposed ordinances.
6. Develop an education and training program to address the need for post construction site runoff water quality control. This information would be developed to address both the needs of the general public as well as City staff. The City will determine what information will be distributed and the best means of providing this information to the public and City staff.

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Recommended goals for this area are:

- Year 1.....Revise existing and develop new ordinances to address the need for structural and/or non-structural BMPs for new development and areas of redevelopment, update Storm Water Management Manual to include additional BMPs for Post-Construction Site Runoff Control, implement educational program, submit annual report to North Dakota Department of Health.
- Year 2.....Develop planning and zoning ordinances to address growth around sensitive areas and areas that are considered undevelopable, which shall be reserved for storm water management and act as the corridor during floods, incorporate inspection procedures for Post-Construction Runoff Control measures, submit annual report to North Dakota Department of Health.
- Year 3 and on.....Develop an operation and maintenance program for Post-Construction Runoff Control measures, continue to enforce ordinances and complete inspections, submit annual report to North Dakota Department of Health.

Pollution Prevention/Good Housekeeping

To comply with the minimum control measures for Pollution Prevention / Good Housekeeping the City must:

1. Develop and implement an operation and maintenance program with the goal of reducing and preventing pollutant runoff from municipal operations into the storm sewer system.

2. Develop and enact employee training on how to incorporate pollution prevention/ good housekeeping practices and techniques into municipal operations such as public space maintenance, fleet and building maintenance, new construction, development activities, storm water system maintenance and wastewater treatment plant operation and maintenance.
3. The City will determine appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

The following areas will be addressed:

1. Develop a staff training program that is reviewed and updated annually with input from appropriate staff and will address the following areas:
 - A. Information on the City Storm Water Program and its objectives.
 - B. Information on the harmful effects of storm water pollution and the effects of the improper use and disposal of fertilizers, herbicides, pesticides and other common chemicals used by City staff.
 - C. Methods to reduce the water pollution impacts of municipal operations.
2. Develop and maintain a regular street sweeping program with priority given to areas that have high potential to contribute to storm water pollution.
3. Develop and implement a regular storm water system maintenance program, including inlets, piping, and drainage ways. The program will include inspection of all structural pollution control devices and at least 20% of the outfalls, sediment basins, and detention/retention ponds each year. Record keeping for these inspections will be included in this program.
4. Establish an interdepartmental advisory committee consisting of representatives from appropriate City departments. This group will meet regularly to discuss operational issues that may impact runoff quality and pollution prevention/good housekeeping practices to reduce pollutant runoff.
5. Maintain a regular inlet stenciling program in cooperation with citizen groups, local schools and scout troops.
6. Develop and implement enforcement procedures to control pollutant runoff from private parking lots.
7. Encourage citizens, businesses, and City departments to use programs to recycle or properly dispose of used motor oil, tires, batteries, and industrial and household hazardous wastes.
8. Evaluate storm water system to identify areas to capture trash and other floatable debris. Identify and implement methods to capture and remove debris before it enters waterways.

9. Continue to provide covered storage for all salt treated sand. As much as practical, snow disposal sites will be located to provide a method to minimize the contribution of pollutants to waterways. Snow disposal areas will be inspected on an annual basis.

The following City department will be responsible:

City of Bismarck
Public Works Department
P.O. Box 5503
Bismarck, ND 58506-5503
(701) 222-6431

Recommended goals for this area are:

- Year 1.....Develop staff training program and start training in Public Works Department, identify high priority areas for street sweeping, develop storm sewer maintenance program, continue to encourage use of recycling programs, submit annual report to North Dakota Department of Health.
- Year 2.....Implement staff training citywide, establish interdepartmental advisory committee, implement prioritized street sweeping program, implement storm sewer maintenance program and inlet stenciling program, develop enforcement procedures to control runoff from private parking lots, continue support of recycling programs, submit annual report to North Dakota Department of Health.
- Year 3.....Continue all above activities, implement enforcement procedures, identify areas to capture trash and floatables and evaluate methods to control, submit annual report to North Dakota Department of Health.
- Year 4.....Continue programs previously identified, implement methods to capture trash and floatables, submit annual report to North Dakota Department of Health.
- Year 5.....Continue all programs previously identified.